Application No. 10/761,216

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Cancelled)
- 2. (Previously presented) The circuit of claim 8, wherein the voltage generator includes a resistor having a temperature dependent resistance.
 - 3. (Cancelled)
- 4. (Previously presented) The circuit of claim 9, wherein the temperature dependent resistance of the resistor increases as the temperature increases, and decreases as the temperature decreases.
 - 5-7. (Cancelled)

41

8. (Currently amended) A circuit for providing a refresh cycle for a memory device, comprising:

a first current generator providing a first current in response to a constant voltage, the first current being substantially temperature-independent;

a voltage generator providing a temperature dependent voltage;

a second current generator providing a second current in response to the temperature dependent voltage; and

a frequency generator providing a frequency in response to the sum of the first and second currents, the frequency generator comprising (i) a capacitor having a terminal to receive the summed first and second currents and (ii) a comparator to compare a voltage at the terminal of the capacitor to a reference voltage and generate an output signal that indicates when the voltage at the terminal of the capacitor exceeds the reference voltage.

- 9. (Original) The circuit of claim 8, wherein the voltage generator includes a current source, a resistor having a temperature dependent resistance, and an output terminal coupled between the current source and the resistor.
- 10. (Original) The circuit of claim 9, wherein the second current generator includes a transistor having a gate coupled to the output terminal.
- 11. (Original) The circuit of claim 8, wherein the second current is turned off at a predetermined temperature.

Application No. 10/761,216

4.

12-24. (Cancelled)